



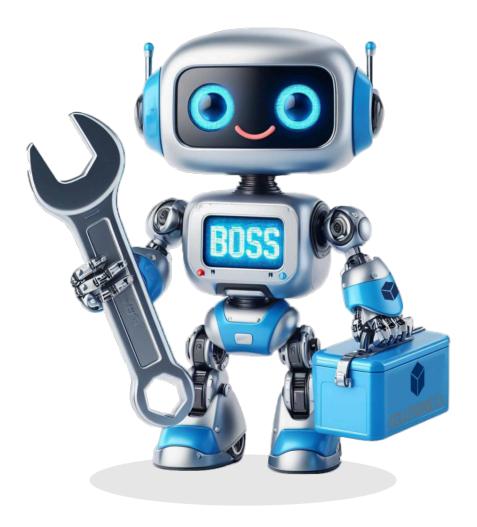
# Document: BOSS 2025 Revision: 5

**Description:** Solutions 3DL's Toolbar for SolidWorks

By: Jonathan Labbé <u>www.solutions3dl.com</u>

Authorized: Daniel Labbé

**Distribution:** Drawing department **Date:** 2024-12-02







# Table des matières

1	Ge	enerality	3				
2	So	SolidWorks Certified Solution Partner					
3	Αι	Audience					
4	Description						
	4.1	The toolbar	3				
5	So	ftware Functionalities	4				
	5.1	Compatibility and integration with SolidWorks	4				
	5.2	Auto-Bom	4				
	5.3	Auto-Name	6				
	5.4	Ultimate Rebuild	7				
	5.5	Change units	7				
	5.6	Image Quality	8				
	5.7	Lock bar	8				
	5.8	Delete all equations	8				
	5.9	Quick Configuration	9				
	5.10	Adjust component visibility	. 10				
	5.11	Quick Complete Cleanup	. 11				
	5.12	Options	. 12				
	5.13	Batch processing	. 13				
	5.14	Propage Props	. 14				
	5.15	Capture	. 15				
		Change Scene	16				





### 1 Generality

This document showcases BOSS, the Toolbar for SolidWorks by Solutions3DL, it will help you learn the functionalities of BOSS as well as how to use and customize them your fit your needs.

#### 2 SolidWorks Certified Solution Partner

Since July 2024, BOSS is an official SolidWorks partner. Solutions 3DL has been certified to distribute and maintain its toolbar to the SolidWorks community. Our program has been cautiously inspected to fit SolidWorks' strict partners criteria. It's proudly that we, Solutions3DL, present you our BOSS toolbox.



#### 3 Audience

This document is destined to experienced users of the SolidWorks software. BOSS supposes you have basic knowledge of SolidWorks, if you don't, we highly recommend the different trainings offered at Solutions3DL. Visit our website for more information www.solutions3dl.com

### 4 Description

BOSS is an integrated add-in to the SolidWorks software, utilizing SolidWorks' API, BOSS allows you to automate many actions a 3D drawer must do every day. It will greatly improve standardization between different components and documents as well as save your drawing team tons of time. The software is available in English and French versions.

#### 4.1 The toolbar

BOSS is integrated to SolidWorks' command bar menu







#### **5** Software Functionalities

This section explains the different functionalities included in the BOSS toolbox.

#### 5.1 Compatibility and integration with SolidWorks

The BOSS toolbar is fully integrated inside SolidWorks, it supports SOLIDWORKS 2022, 2023, 2024 & 2025.

#### 5.2 Auto-Bom



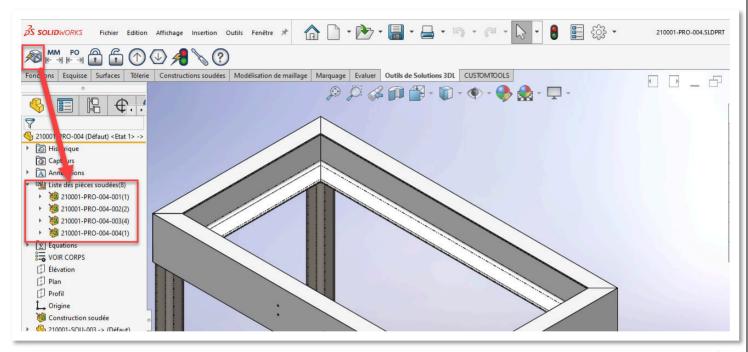
The **Auto-Bom** tool allows you to automatically insert the BOM table or a cut list into a drawing based on the SOLIDWORKS file type (assembly/sheet metal part/construction part welded with a single part or multiple body). Figure 5.1.1 shows an example of a bill of materials for an assembly.

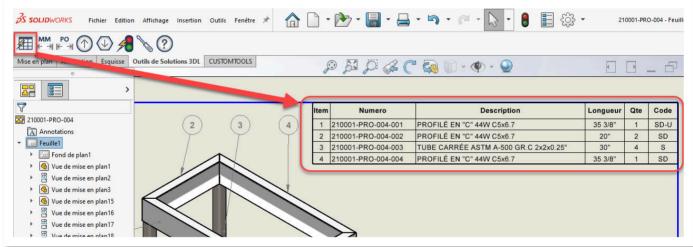
The tool can be configured to insert the right BOM or the right part list depending on the type of SolidWorks file (Assembly, Sheet Metal with simple of multiple bodies, Weldment, part)

Images below represent Auto-Bom with a multiple body Weldment component











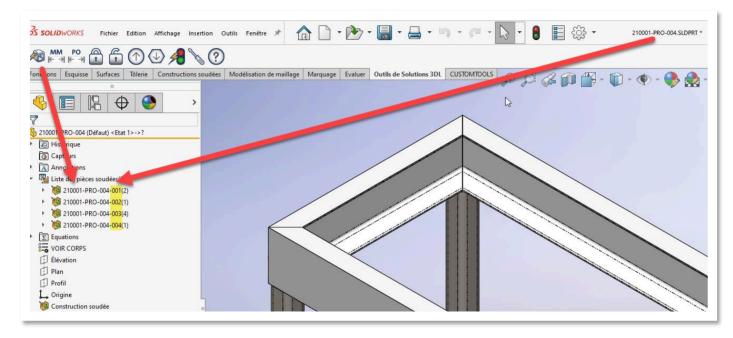


### 5.3 Auto-Name



The Auto-Name tool automatically changes the names of parts in the welded parts list. The tool renames articles according to the file name and adds an increment according to the number of different articles.

Image bellow is an example of Auto-Name's result







#### 5.4 Ultimate Rebuild

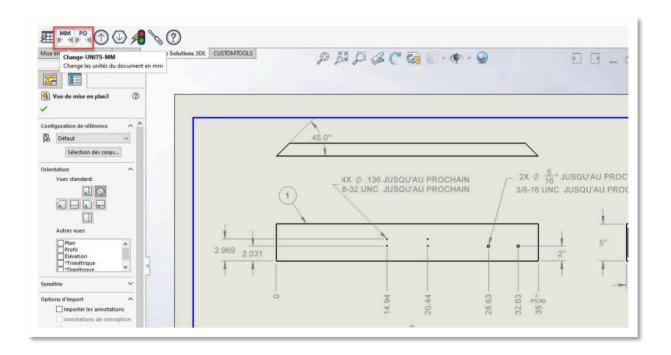


The **Ultimate Rebuild** tool allows you to perform a complete reconstruction of your assembly and its subcomponents. Unlike the "Ctrl B" reconstruction that rebuilds only the newly created or modified functions and their children or a "Ctrl Q" keyboard that results in a complete reconstruction of all the functions in the model. In addition, **Ultimate Rebuild** can be launched from the drawing of the assembly.

**Ultimate Reconstruction** in the background, opens each part of the assembly and rebuilds them. This is particularly useful when working with the skeleton method, some parts of which contain equations.

### 5.5 Change units MM PO PO PO

The **Change Units** IN "PO" and "MM" tools allow you to switch document units from metric (mm) to imperial (in "PO") or vice versa for an assembly, part, or drawing while maintaining weight in lbs. Figure 5.4.1 shows the procedure to follow.





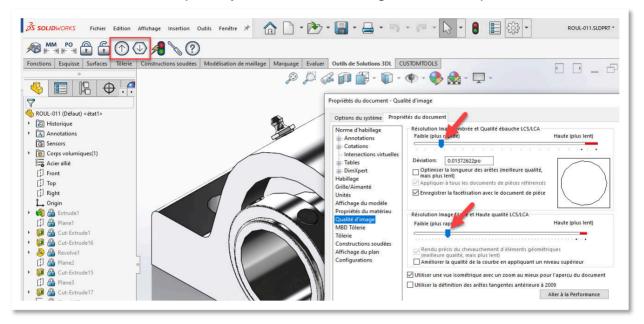


#### 5.6 Image Quality





The **Image Quality** automatically decreases or increases the image quality of a file. This is especially useful for increasing SolidWorks' performance.



### 5.7 Lock bar





Use the Lock Bar tools to quickly move down or up the lock bar of a part. This is particularly useful when you want to reduce reconstruction time and wasted time. Perfect for hardware parts.

### 5.8 Delete all equations



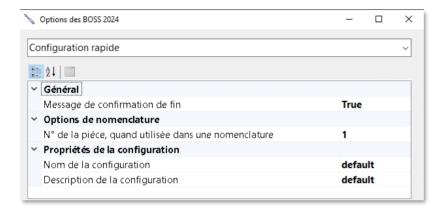
The **Delete All Equations** tool allows to quickly erase all equations from SolidWorks. Useful when you want to reduce reconstruction time and wasted time. Perfect for hardware parts.

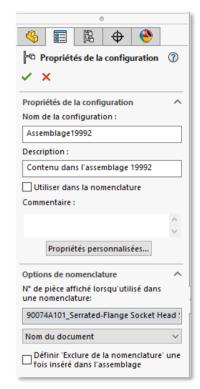




#### 5.9 Quick Configuration

The **Quick Configuration** tool adjusts a part or assembly configuration according to the preset you have setup if your settings, in only one click, you can change the Bill of Materials options, the configuration name and description. Perfect to correct hardware parts from places like McMaster Carr, to note that quick config is allowed in batch files processes making it a very strong and time saving tool.







Perfect to correct hardware pieces from Mc-Master Carr





#### 5.10 Adjust component visibility



Adjust component visibility allows to correct graphic zone components or tree view components visibility. For instance: You can chose to show or hide axes, origins, sketches, and other features and components. It's an efficient way to show or hide different components very quickly, to allow different views of your

object. This tool is available in batch treatment, or to all children of a main assembly component, therefore making it a huge time saver when working with big assemblies.

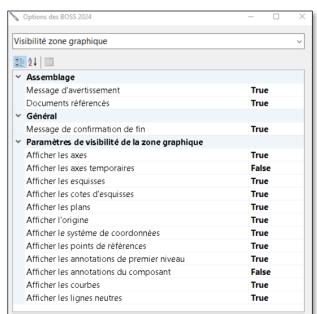




Graphical Zone and it's parameters

Tree View and it's parameters









#### 5.11 Quick Complete Cleanup



**Quick complete cleanup** tool begins many treatments simultaneously, allowing you to clean and reduce considerably the weight and complexity of your file, making it more readable by the computer and therefore making it more performant and more manageable by your computer. Tests have shown a decrease in weight of 15% to 20% on hardware pieces.

For instance, Quick complete cleanup can, in one click:

- 1. Erase all equations 🔀
- 2. Correct BOM options with Quick Configuration 👺
- 3. Drop image quality 🕠
- 4. Drop the freeze bar 👚
- 5. Correct visibility of tree view elements
- 6. Correct visibility of graphic zone elements



Perfect to correct hardware pieces from Mc-Master Carr





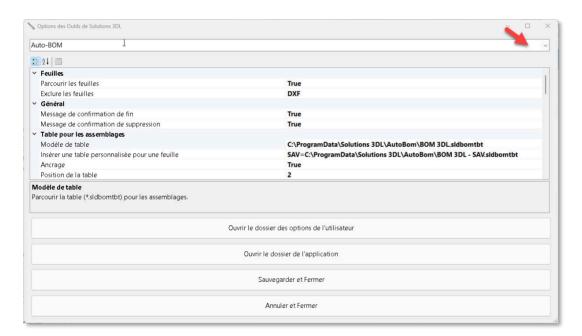
#### 5.12 Options



The **Options** tool allows you to customize your BOSS software. There are two option windows. (See red arrow on the image below) In the first window, we find the options for Auto-BOM. These options allow you to choose the folder where the different BOM tables or cut lists are saved, depending on the type of file. It also allows you to display or not warning messages and much more. *See picture below:* 

Just point your own tables for each file type.

- o Table for assemblies
- o Table for constructions with a single body
- Table for multi-body part
- Table for part with one body
- Table for sheet metal



The other windows in the Options menu allow you to customize the Auto-NAME, Ultimate Rebuild, Change units, Image Quality, Block Bar, adjust element's visibility and full complete cleanup functions.

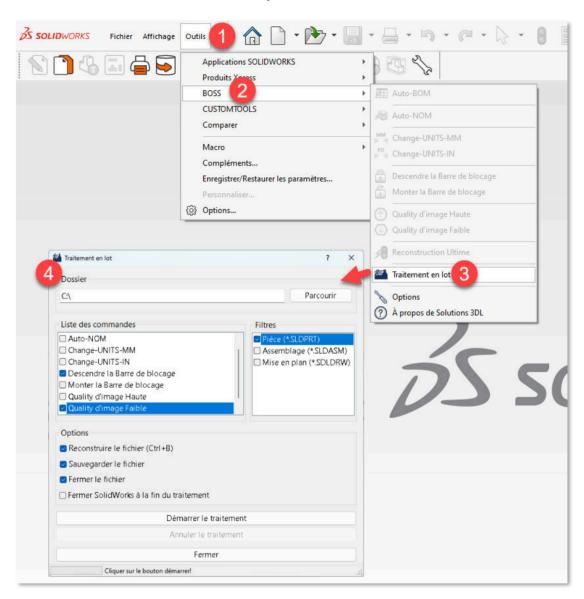




#### 5.13 Batch processing



The **Batch processing** tool allows you to perform all the functionality of BOSS for all files in a folder and its subfolders. The tool also allows you to rebuild/save and/or close files automatically.



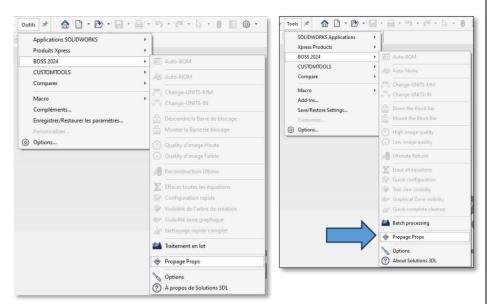




### 5.14 Propage Props (PP)



The **Propage Props** tool is our new addition to the BOSS tools library. It powers a fast and accurate way to modify the custom text properties of parts, assemblies as well as drawings using Excel's Grid System.



Once started, Propage Props will guide you through all the steps to modify your document's custom properties in batch



File name	To Treat		Ajouter	Ajouter	Ajouter
#Nom du fichier	#Type	#À traiter	drawn	date	partNo
2242-P02	.SLDPRT	OUI	D.L	2024-05-05	1
930802-0001	.SLDPRT	OUI	S.B	2024-05-06	2
930802-0002	.SLDPRT	OUI	E.C	2024-05-07	3
2242-P01	.SLDPRT	OUI	D.L	2024-05-08	4
2242-P04	.SLDPRT	OUI	D.L	2024-05-09	5
930802-0001	.SLDPRT	OUI	D.L	2024-05-10	6
930802-0002	.SLDPRT	OUI	D.L	2024-05-11	7
930802-0003	.SLDPRT	OUI	E.C	2024-05-12	8
930802-0004	.SLDPRT	OUI	E.C	2024-05-13	9





#### 5.15 Capture

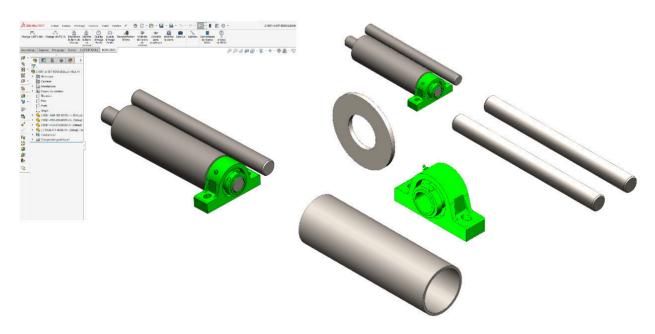


The **Capture** tool provides a simple and efficient way to generate high-guality .png or .jpg images of your assemblies or parts. Whether you need to capture all elements of an assembly at once or focus on specific components within a folder. this tool offers impressive flexibility.

Easily adjust the view to various perspectives (isometric, trimetric, etc.) and zoom in or out with precision. The "Zoom to Fit" option automatically adapts the view to your screen, ensuring the perfect fit every time.

Additionally, Capture gives you the option to personalize the background, allowing you to choose between a SolidWorks-style white backdrop or a transparent background. This feature enhances the seamless integration of your images into presentations or other media.

For example, there 5 images (on the right) were generated by this assembly (on the left), in a single click. These images are on a transparent background, therefore can easily be integrated in your part catalog, on your online website or in another environment.







# 5.16 Change Scene



The Change Scene tool allows you to easily customize the visual environment of your components, whether it's from the main assembly or a folder. In just a few seconds, you can transform the appearance of multiple elements at once, ensuring a more consistent and professional presentation.

You can select from a range of popular SolidWorks scenes.

This is an excellent way to standardize and harmonize your drawings, ensuring consistent results across all your projects.